

Minutes of 58th Annual Fellows' Forum of Royal Society Te Apārangi

The meeting was held on Friday, 19 April 2024 at Royal Society Te Apārangi, and via Zoom

Present: Geoff Chase (AEC Chair), Susy Frankel (AEC Deputy Chair), Brent Clothier (President), Jane Harding (AEC Convenor Health and Medical Sciences), Nancy November (AEC Convenor Humanities), Cather Simpson (AEC Domain Convenor Technology Applied Sciences and Engineering), Peter Barrett, Richard Beasley, Richard Bedford, Klaus Bosselmann, Virginia Braun, Tony Conner, Fred Dave, Catherine Day, Kenneth Dodds, Alison Downard, Nicola Gaston, Nicholas Golledge, David Grattan, SallyAnn Harbison, John Harper, Janet Holmes, Margaret Hyland, Rod Jackson, Geoffrey Jameson, Carwyn Jones, Charlotte Macdonald, Martin Manning, Roger Morris, Tim Naish, Peter O'Connor, Vincent O'Malley, Nigel Perry, Jenny Pollock, Elaine Reese, Mark Richards, Peter Shepherd, Murray Thomson, John Townend, Jadranka Travas-Sejdic, Graeme Wake, Graham Weir, David Whitehead, David Williams, Janet Wilmshurst, Mengjie Zhang.

Apologies: Doug Armstrong, Barbara Barratt, Kelvin Berryman, Richard Blaikie, Barbara Brookes, Deidre Brown, Karin Bryan, Hallie Buckley, John Butcher, Rowland Burdon, John Caradus, Andrew Cleland, Marston Conder, Peter Fineran, Richard Furneaux, Juliet Gerrard, Gail Gillon (AEC Co Convenor, Māori knowledge and development), Peter Gostomski, Janet Grieve, John Harper, Christian Hartinger, Debbie Hay, John Hearnshaw, Shaun Hendy (AEC Convenor Physical Earth and Mathematical Sciences), Simon Holdaway, Philippa Howden-Chapman, Geoffrey Irwin, Lynda Johnston, Amokura Kawharu, Robin Kearns, Simon Keller, Tony Kettle, Robin Longhurst (AEC Convenor Social and Behavioural Sciences), Charlotte Macdonald, Ken Markham, John McEwan, Nick Mortimer, Michael Neill, Campbell Nelson, Andre Neis, John Ogden, Steven Ratuva, Anthony Reeve, Ian Reid, Poia Rewi, Brett Robinson, Allen Rodrigo, Charles Semple, David Schiel (AEC Convenor Biological and Environmental Sciences), David Skegg, Geoffrey Stedman, Colin Townsend, John Townend, Jadranka Travas-Sejdic, Graham Weir, Colin Wilson, Denise Wilson (AEC Co convenor Māori knowledge and development), Kevin Trenberth.

In attendance: James Henry, Paul Atkins, Marc Rands

1. Welcome

Geoff Chase welcomed Fellows to the Forum, and Brent Clothier gave a karakia.

2. Valedictories

Susy Frankel announced the deaths since the last Annual Forum of the following Fellows and Honorary Fellows:

- **Professor John Dunmore FRSNZ** (Massey University) 1923-2023. John Dunmore was a leading scholar of Pacific history, and the authority on French exploration of the Pacific, notably the eighteenth-century voyages, and made an Officer in the Legion d'Honneur by the French Government in 2007.
- **Professor Ewan Fordyce FRSNZ** (University of Otago) 1953-2023. Ewan Fordyce was New Zealand's leading vertebrate palaeontologist and a world leader in research on the evolution of whales, dolphins and penguins, and winner of the Society's Hutton Medal in 2012.
- **Distinguished Professor Yoko Ota Hon FRSNZ** (National Taiwan University) 1928-2024. Yoko Ota was an eminent scientist in the field of Quaternary Geomorphology and tectonics, as

was at the forefront of the world-wide evaluations of sudden major land displacements in relation to regional and local earthquake hazard.

- **Emeritus Professor Leon Phillips FRSNZ** (University of Canterbury) 1935-2023. Leon Phillips was a physical chemist best known for his work in photochemistry, flame chemistry, and gas-liquid interfaces, winning the Society's Hector medal in 1979.
- **Professor Richie Poulton CNZM FRSNZ** (University of Otago) 1962-2023. Richie Poulton led the Dunedin Multidisciplinary Health and Development Research Unit at the University of Otago, one of the most successful and highly cited longitudinal studies of health and development in the world, and winner of the Society's Rutherford medal in 2022.
- **Professor Iain Raeburn FRSNZ** (Victoria University of Wellington) 1949-2023. Iain Raeburn was a mathematician with expertise in functional analysis with research interests in representation theory and analysis of dynamical systems, fuelling new areas of interaction between disciplines.
- **Dr Colin Webb FRSNZ** (DSIR) 1949-2023. Colin Webb has made significant science contributions to New Zealand botany, publishing over 80 scientific papers on taxonomy, reproductive biology, and the evolution of plant breeding systems, and the 2006 winner of the Hutton medal.
- **Professor Ian Witten FRSNZ** (University of Waikato) 1947-2023. Ian Witten was an expert in computer software and digital technology, co-founding the Greenstone Digital Library Software and making a major contribution in the digital libraries field. Ian was awarded the Society's Hector Medal in 2005.

Obituaries have been or will be lodged on the Royal Society website as they are provided.

3. Report of Academy and remarks from Chair of Academy, Distinguished Professor Geoff Chase FRSNZ

Good morning everyone and welcome to the 58th Annual Fellows' Forum of the Royal Society Te Apārangi. Yesterday we welcomed 21 new Fellows and one Honorary Fellow into the Academy, and we have already started the Fellowship nomination process for 2024. For those new Fellows I charge you to use this opportunity to contribute and make a difference to the New Zealand research system. One way is by encouraging recognition of worthy academics around you through Fellowship and Medal nominations. Last year the number of new Fellowship nominations dropped, so if you know of suitable Fellowship nominees, please nominate them for Fellowship. For the Society medals, we will be convening the medal assessment panels soon, with the winners announced at three locations across New Zealand in November, as we did last year. Thank you.

4. Report by the Chief Executive, Paul Atkins

Nau mai haere mai. Welcome. Ko Paul Atkins toko ingoa. Welcome to all of you and in particular our new Fellows. Our Academy is a fundamentally important pillar of this organisation, and it is a great privilege to welcome you into it. Thank you for your presentations yesterday, and for making your work accessible to us all!

Since we last met in this auditorium in 2023, we have placed in the calendar additional opportunities for the Fellows to meet and discuss topics of interest. These were scheduled around the annual Research Honours

events in November, and it is our intention to do this again this year. So, this event isn't the only opportunity for us to meet.

Today I'd like to mention several items that have been of particular note since we last met. One is the Society's 20-year Long-Term Strategy. The consultation process has been extremely important in affording us the opportunity to sit down together to identify what we want from our organisation. Looking out 20 years means the long-term strategy is essentially high-level, a set of guide rails to ensure we are heading in the right direction when we develop our more immediate operational plans. One of the important things from the consultation feedback, apart from the importance of our independence, people and knowledge, is being outward looking, of value to our country, not only ourselves. So, we will be working together and using our assets together for the world around us and the benefit of all.

As the Strategy is not intended to be a detailed plan, we have been working with Council on a three-year rolling Business Plan, to enable us to focus on what are the big things that we want to focus on over that period. This will include things that are an evolution of what we do already, but also a handful other things where we want to make a step change to propel us into different space, and for those five or six things, we will be putting together detailed operational plans. These will include our relationship with te ao Māori, our organisational sustainability (both environmental and financial), and mechanisms to have a greater 'voice' on key issues affecting our world. This will provide a clear grounding of the consultation we did with you for the Long-Term Strategy.

On another matter, I would like to acknowledge the current turmoil across the whole system in which we all operate, and the pain and anxiety this is causing for so many. The Society has not been publicly visible with regard to this, as we have chosen to engage with the issues directly with those who hold greatest influence in the system and have been doing that for some time. So, we are engaging with relevant ministers and have, for example, written to ministers expressing our concern, and have another meeting with the Minister of Science, Innovation and Technology in a couple of weeks' time. Our concerns are being expressed in relation to the system as a whole, rather than specific individuals or institutions, and the potential for significant loss of expertise at a national level. I have also had a conversation with Sir Peter Gluckman in relation to the two reviews he is Chairing, and we will be engaging actively and positively with the review process, as I'm sure you all will be.

There has, of course been very much more than this going on during the year and I would like to thank my colleagues in the Society for their outstanding work, our Council and AEC for their commitment of time, energy and injection of wisdom, to Brent for his extraordinary input of time, passion, care and thoughtfulness in his role as President, to Jane for the role she will play in the next 3 years, and to all of you for your support. Our Academy is the pillar of our organisation and we welcome new Fellows into our midst and thank our existing Fellows. Together we will grow pathways of knowledge for the benefit of all, and I am looking forward to engaging with you in coming months and being part of making a difference for our country.

5. Report by the President, Dr Brent Clothier FRSNZ

Tēnā katou katoa. Ko Brent Clothier tōku ingoa. I am President of the Royal Society Te Apārangi. Nau mai haere mai whānau to our whare, and to those on Zoom. This is my last forum as president so some reflection on the whaikōrero yesterday and reinforcing what has been said so far and welcome to Professor Dame Jane Harding as our incoming Society President.

Going back to July 2020, we had some adversity. In the first 18 months there were four chief executives - some went on to become Governor General, and others retired. There was an extraordinary meeting of Fellows, with Fellows wanting more agency at the Society, which we listened to, for our Academy and across the breadth of our membership. As part of the resulting consultation, we received 400 responses and met at six

locations for face-to-face meetings with Fellows, members, external stakeholders nationally and internationally, with Māori and early career researchers. We engaged Martin Jenkins to undertake the consultation so it could be at arm's length from us, and it has led to our current intergenerational 20-year strategy. Our vision is an Aotearoa New Zealand guided and inspired by science and research. Our purpose is growing knowledge pathways to be shared for the benefit of all in New Zealand. For this we bring independence, excellence, diversity and convening power. We will develop strategic priorities and a three-year action plan for Jane's Presidency, which will be signed off at the June council meeting. Also, we engaged and gave agency through an open process for the selection of the President elect. I don't know how I was selected!

I would also like to comment on other things being done by the Society. We have two new Council members, Geoff Chase and Susy Frankel from the Academy Executive Committee, Te Kani Kinga and Erena Wikairi from the Māori electoral college, Htin Aung representing early career researchers, and two co-opted members, Marie Bradely and Steven Ratuva. Currently there is one vacant position. We had a Companions Day last year, at which three new Companions were admitted, Prue Williams, Liz Wedderburn and Ngahuaia te Awekotuku.

The Society engaged internationally, with Paul and I attending the annual ACOLA meeting of Australian Academies in Australia and the International Science Council (ISC) meeting in Paris, as well as meeting with the academies in the UK. The Society is hosting the ISC Pacific focus, with the Australian Academy of Sciences, with work to establish a Pacific Academy, and congratulations to Sir Colin Tukoitonga and Professor Hamish Spencer who were recently elected Fellows of the ISC. The Society hosted the NZ-China Scientist Exchange Programme, and the Falling Walls programme with the German Embassy, where young researchers speak for three minutes about their research idea. The winner was selected to attend the international final in Berlin, and the second-place winner from the Pacific also received MBIE funding to attend as well.

Over the year, the MBIE funded Science Teaching Leadership Programme worked with schools and teachers in science, as well as working with Ngati Whakaue in the Taiao Aronui programme, providing professional development in pūtaiao science and mātauranga Māori in Rotorua. The Society was awarded the contract to deliver the Tawhai Te Mana Fellowship scheme, replacing the Rutherford and Jame Cook Fellowships, for early, mid and senior career researchers.

So in conclusion, we now have an intergenerational strategy that will connect piecemeal the three year terms of presidents, with the Academy at the centre to provide strength, to achieve our purpose, in order to realise our vision.

Nau mai, haere mai. Nō reira, tēnā koutou, tēnā koutou, tēnā tātou katoa

6. Presentation on supporting Multi Inter Trans disciplinary research (Dr Jo Bailey, Senior Lecturer | Co-lead, Visual Communication Design, Wellington School of Design, Massey University)

Jo Bailey gave a presentation on Intra, Cross, Multi, Inter and Trans disciplinary research, and how to support it. A version of the presentation can be seen [here](#).

Key points from the subsequent discussion included:

- Some areas were inherently more interdisciplinary, such as geography, climate change or sustainability, which involved philosophers, scientists, social science and lawyers.

- There was a need to overcome barriers between disciplines, with universities now promoting transdisciplinary courses. However, it was becoming a bit of a buzz word, with its meaning becoming lost, and there was still a need to have strong underpinning disciplinary knowledge, and not all problems benefited from this approach.
- At a school/college level there was resistance to transdisciplinary courses from university entrance systems, which wanted to see clear disciplinary knowledge in the school students. So transdisciplinary might be more productive in research rather than education.
- Successful collaboration required time to get to understand the language and systems of different disciplines. This was a problem in funding/academic systems based on ridged fixed time frames.
- Disciplinary collaboration might be easier, the closer they are, with the sciences being easier to collaborate, with shared touch points, then between science and humanities or arts. More distant disciplines require more time to understand each other, which may not fit in a standard three-year funding project.
- For collaborations to work there needs to be agreed motivations for working together, be it outputs, values or connections.

Jane Harding thanked Jo Bailey for her presentation and the great discussion it prompted, noting that it was a great start to the Fellows forum discussion template.

In closing, Jane Harding thanked everyone for attending in person, and on-line, and hoped to see them at the next Academy event.